more like the females of the two species. Tibiae in both sexes with bristles about as in *alpicola*, but with mid and hind tarsi more spiny beneath, which attains its greatest development in the mid basitarsi of the male, where there are 10-12 striking spines in each of two rows. Wings as in *alpicola*. Size the same.

One male, one female, Square-Top Mt., Grant, Geneva Park, Colorado, July 24, 1916. Altitude 11,500 feet. Collected by L. O. Jackson. Types in the Bureau of the Biological Survey, Washington, D. C. They were sent me for study by J. R. Malloch.

## A New Membracid on Cypress (Homop.).

By W. D. Funkhouser, Cascadilla School, Ithaca, New York.

(Plate XI.)

Through the courtesy of Mr. H. H. Knight, of Cornell University, I have been permitted to examine a series of specimens of a very interesting species of Membracidae collected from cypress in Louisiana in the summer of 1917.

The insect has apparently not been described and is of interest not only because it is the first membracid recorded on this host but also because it proves to be another representative of the genus *Stictolobus* erected by Metcalf in 1916\* to accommodate *Membracis subulata* Say.

This genus is peculiar in showing the pronotal characters of a *Cyrtolobus* and the wing structure of a *Stictocephala*. The anterior elevation of the pronotum is obtusely rounded as in *Cyrtolobus* and the general appearance of the insect suggests that genus. The forewings, however, are entirely free, as in *Stictocephala*, although there are no indications of carinate sides on the metopidium.

The series consists of thirty-seven specimens. Seven males and thirteen females were collected at Bogalousa, Louisiana, on June 15, 1917, and eleven males and six females were taken at Colyell, Louisiana, on June 16. All were found on cypress.

<sup>\*</sup>Metealf, Z. P. The Rediscovery of Membracis subulata Say, with a Description of a New Genus (Homop.). Entomological News, January, 1916, Vol. xxvii, No. 1, 1-3 pp., Pl. I.

The species is reported as being comparatively abundant in the type locality on the dates given and may be described as follows:

Stictolobus trilineatus sp. nov. (Plate XI).

Near Stictolobus subulatus Say but differing in color, in markings, in punctuation and slightly in wing venation.

Bright green with three longitudinal white stripes; posterior process of pronotum castaneous, tip brown; tegmina hyaline, bases slightly punctate, veins broadly marked with brown, tips fuscous; thorax and legs greenish-yellow; under surface of abdomen yellow.

Head yellow-green margined with lighter, impunctate, slightly striate; basal line adjoining prothorax much elevated in middle half; prominent swelling above each ocellus; median sulcus faint; inferior margin smooth; eyes deep brown, prominent, extending laterally beyond the humeral angles; ocelli prominent, reddish, a little nearer to each other than to the eyes and situated on a line extending through centers of eyes; clypeus long, extending as far below the inferior margin of the face as its projection above the margin, hirsute at tip.

Pronotum bright green, deeply and uniformly punctate, gradually rounded in front with no indication of carinations on sides; metopidium wider than high, smooth callosities above eyes joining in narrow line in center; humeral angles not prominent, rounded; posterior process gradually acuminate, deflexed, extending beyond tip of abdomen but not reaching apices of tegmina, sharply carinate above, bright castaneous with tip brown; semicircular impression on each side of pronotum very pronounced; median carina not percurrent, beginning at about middle of dorsal line and becoming prominent and strong posteriorly; three prominent greenish-white lines extending longitudinally on the pronotum, one on the median dorsal line beginning at base and extending to the point at about the middle of the dorsum where the median carina begins, one on each side arising just above the eye, extending over the shoulder and ending at the middle of the lateral margin, all of these lines strongly punctate.

Tegmina entirely free from pronotum, hyaline, base greenish and slightly punctate, tip fuscous in external border: middle half of radial and cubital veins broadly marked with brown, costal margin white; tip acute, middle apical cell triangular and petiolate, other apical cells varying greatly within the species; hind wings entirely hyaline, external border wrinkled, apical cell usually but not always truncate.

Sides and under surface of thorax greenish-yellow; pubescent; legs brownish-yellow, tibiae greenish, claws fuscous; abdomen yellow, under surface concolorous yellow, apical end tinged with greenish.

Sternal plate of male acute, smooth, tip brown; lateral valves incon-

spicuous; apical tergum armed with a tooth on each side below; oedeagus long, narrow, brown, very slightly swollen at tip, styles narrow and pointed.

Last ventral segment of female sharply notched in middle, rounded on either side of notch; tip of abdomen green, lightly pubescent; ovipositor brown.

Length to tip of tegmen 6.7 mm. Width between humeral angles 2.4 mm.

Type—Male. Type locality: Bogalousa, Louisiana. Female does not differ in size or markings.

Type, allotype and twenty-one paratypes in author's collection; ten paratypes in Mr. Knight's collection; four paratypes in Cornell University collection.

The wing venation in this species shows considerable variation as represented in Plate XI, Figs. 1, 6, 7 and 8. In the fore wing M3 and M4 are often separated, making six instead of the normal five apical cells (Fig. 8) and changing the shape of the cells in the apical end of the wing. In the hind wing R4+5 is usually coalesced with M1+2 (Fig. 6) to form a truncate terminal cell, but occasionally they are separated, leaving the terminal cell petiolate (Fig. 7). The forewing in no case shows the three discoidal cells as found in the wing of *Stictolobus subulatus* Say.

## EXPLANATION OF PLATE XI. Stictolobus trilineatus sp. nov.

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Fig.	Ι.	Lateral	view.

Fig. 2. Frontal view.

Fig. 3. Dorsal view. Fig. 4. Male genitalia—caudal

view.
Fig. 5. Female genitalia, ventral view.

Fig. 6. Hind wing, normal venation.

Fig. 7. Hind wing, showing variation.

Fig. 8. Fore wing, showing variation.

## A Review of Reviews (Lep.).

By J. McDunnough, Ph.D., Decatur, Illineis.

My paper in Entomological News, xxvii, 393, has been the partial subject recently of three articles by well-known lepidopterists; two of the authors, H. G. Dyar (Ins. Insc. Menstr., v, 42) and G. Bethune-Baker (Ent. Rec., xxix, 219)